

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 10/721,262

REMARKS

Claims 1-18 are pending in the current application. New claims 9-18 are added by this Amendment.

Claims 1-5 are rejected under 35 U.S.C. § 102(b) as being anticipated by Saitoh (U.S. Patent No. 6,400,920). Claims 6-7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Saitoh in view of Urano (U.S. Patent No. 4,254,339). Claims 8 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Saitoh in view of Nii (U.S. Patent No. 6,693,295).

Applicant submits the arguments below to traverse the prior art rejections and adds new claims 9-18.

Applicant's invention relates to an apparatus and method for image recording. In an image recording apparatus, organic solvent within the ink is apt to evaporate within the housing of the apparatus. Therefore, a device and method for recovering vapor of organic solvent evaporated within the housing of the image recording apparatus is desired. In an embodiment, Applicant's invention uses a water vapor removing section to remove water vapor and a solvent recovering section to recover vapor of organic solvent, which evaporates within the housing of an image recording apparatus.

Rejection of Claims 1-5 under § 102(b) by Saitoh

Turning to the cited art, Saitoh relates to a device and method for recovering vapor of a developer medium on a photoreceptor. Developer medium is absorbed in a liquid condition from the photoreceptor into a drying belt, and is then heated and vaporized. Col. 4, lines 42-45. Except for the portion that is in contact with the photoreceptor, a portion of the drying belt is covered and closed with a manifold so that the vaporized developer medium diffused from the

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drying belt is sucked into the vapor recovery device. Col. 4, lines 45-54. Developer medium is then selectively liquefied and recovered from the developer medium vapor and water vapor mixture. Col. 7, lines 21-30.

Examiner contends that Saitoh teaches each feature of independent claim 1. However, claim 1 recites an image recording apparatus comprising, *inter alia*, “a solvent recovering section which recovers vapor of *organic solvent, which evaporates within the housing.*” The Examiner generally cites the abstract of Saitoh as teaching of this feature of claim 1. However, the abstract of Saitoh only specifies that the vaporized developer medium and water vapor are sucked through a suction port into the developer medium vapor recovery device and does not disclose that the developer medium evaporates within any kind of recording apparatus housing as claimed. Saitoh further discloses that the vapor is collected from the drying belt of a drying apparatus, from which vaporized developer medium is diffused. By contrast, claim 1 describes a solvent recovering section which recovers vapor of organic solvent, which evaporates within the housing. Assuming *arguendo* that the developer medium in Saitoh corresponds to the organic solvent in Applicant’s invention, Saitoh does not teach or suggest a solvent recovering section which recovers vapor of organic solvent, which evaporates within the housing of an image recording apparatus, as recited in claim 1. Therefore, independent claim 1 is patentable for at least this reason.

Claims 2-5 are patentable at least by virtue of their dependency.

In addition, claim 3 is patentable because Saitoh fails to disclose or suggest an image recording apparatus wherein the water vapor removing section is provided at an inlet port which takes in air from outside of the housing into the inside of the housing. Although the Examiner

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argues that the reference numbers 103 and 104 correspond to the claimed water vapor removing section, the capacitor 103 and the developer producing section 104 do *not* remove water vapor. Rather, only the developer medium is liquefied at the capacitor 103 for collection at the developer producing section 104 and any water vapor drawn into the capacitor 103 is returned to the shell space 106. *See Abstract.* Thus, Saitoh cannot possibly disclose or suggest the water vapor removing section as claimed.

With further regard to claim 4, this claim recites that “the solvent recovering section is provided at an outlet port which exhausts air from the inside of the housing to the outside of the housing.” Examiner relies on Fig. 5 of Saitoh as teaching of this feature. Examiner refers reference numbers 103-104 in Fig. 5 as corresponding to the claimed housing and states that “outlet portion is seen as part leading away from the thus defined housing.” However, reference number 103 in Fig. 5 refers to a capacitor that recovers the developer medium and 104 refers to a developer producing section that stores liquefied developer medium. Col. 4, lines 50-51 and 62-65. Neither the capacitor nor the developer producing section in Fig. 5 of Saitoh serves as a housing of an image recording apparatus. Therefore, claim 4 is not anticipated for this additional reason.

With further regard to claim 5, this claim recites that “housing is in a substantially sealed state except for the inlet port and the outlet port.” Again, Examiner relies on Fig. 5 as teaching of the housing and the ports. For the same reasons as explained in the paragraph above, none of the parts identified by Examiner in Figs. 5 of Saitoh can serve as an inlet port or an outlet port of the claimed housing. Therefore, claim 5 is not anticipated for this additional reason.

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Rejection of Claims 6 and 7 under § 103(a) by Saitoh in view of Urano

Claims 6 and 7, which depend from claim 1, are patentable for at least the deficiencies of Saitoh submitted for claim 1 and the failure of Urano to make up for the deficiencies of Saitoh.

Rejection of Claim 8 under § 103(a) by Saitoh in view of Nii

Claim 8, which depends from claim 1, is patentable for at least the deficiencies of Saitoh submitted for claim 1 and the failure of Nii to make up for the deficiencies of Saitoh.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Susan Peng Pan
Registration No. 41,239

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

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